4 Pages in all

17 February 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attn: Mrs. Kammie Cuneo
Fax: 571-273-1957

Re:
Application No. 08/579,395
Filing Date: 12/27/1995
Inventor: William H. Swain
Confirmation No: 4200
Examiner: Karlsen, Ernest F.
Art Unit: 2829

Notes Relating to a Telephone Conference of 12 Feb 04 between Mrs. Kammie Cuneo, and William Swain regarding Application 08-579-395. Mrs. Cuneo asked Mr. Clayton LaBalle to join us.

Greetings,

I hope that these views of mine will clarify some of the issues we discussed.

1. Restriction is not needed. The Invention is one.

There are no patentably distinct inventions or species. The Examiner accepted this when he wrote in his final rejection:

Examiner 29 Jan 03 Page 2, par. 1 and par. 2.	*1. In Paper No. 29 the examiner stated:* *"In response to requirements to elect Applicant has argued that there are no patentably distinct inventions or species. Therefore, the Restriction Requirement of October 31, 2001 is withdrawn.*

I said the same with more detail in my latest response. For example:

Swain Last paragraph p. 5; 18 Nov 03	*Basic Concept and Requirement to Restrict* *The basic concept of this invention includes a sensor based on the above primary teaching plus means to properly control the magnitude of the operating parameter. It is included in generic claims 45 plus 63-66. The basic concept is also in one form or another in each one of claims 32-62. So no one claim is patentably distinct from another. Thus the present requirement to restrict is as improper as the three (3) previous requirements[1] which were withdrawn by the Examiner.* --- *[1] The first three (3) requirements to restrict were in examiner's actions dated 21 February 1997, 28 January 1999, and 31 October 2001.*

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Swain
par. 10
p. 7; 18 Nov 03

The basic concept, which includes the primary teaching (the Discovery and the Essential Characteristic) is contained in one form or another in each and every one of claims 32-66. Therefore, no one claim would be patentably distinct from any other claim. This is especially true of generic claims 45 plus 63-66.

2. One Basic Concept for Two Species.

After reading my 1995 Application it should come as no surprise that there are now two species, each of which uses the basic concept. This includes the Discovery which is used in both the Combiner Species and the Better SNR species. The DISCOVERY is:

Swain
1995
page 11, par. 3

DISCOVERY

The inventor discovered that the output V of many Swain Meter clamps was a lot less sensitive (1/2 to 1/3 in some sensors) to a change in the intensity of a non-uniform magnetic field H_n when the magnitude of an operating parameter I_{sm} was doubled or tripled. And the sensitivity (gain) to a change in signal input current I stayed constant to within a few percent.

Page one of my 1995 Application alludes to the Combiner Species:

Swain
1995
page 1, par. 3

The method used is usually to find or construct a sensor which has a signal to noise ratio SNR which changes a lot when its operating parameter is selectively modulated. The output of the lower noise sensor is combined with the output of the higher noise sensor so that, in the ideal case, the noise cancels, but a good signal remains. The easier way may be to take part of the output of the higher noise sensor and subtract it from the output of the lower noise sensor. Two sensors can be used, or the operating parameter of one sensor can be modulated (driven) from a higher to lower noise state.

The first page of my 1995 Application also alludes to the Better SNR species:

Swain
1995
page 1, par 7

In a simpler form, SNR is substantially improved by operating at a more favorable operating parameter magnitude. Noise is not canceled, but this form can be faster and cost less.

The basic concept also includes the Essential Characteristic plus means to govern the Operating Parameter. The Essential Characteristic is shown in 1995 Figure 5, most recently in "The Invention" section of my response of 28 November 2003, pages 3 - 5. Means to govern the Operating Parameter are shown in 1995 figures 9 and 11, and elsewhere in the Application.

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As early as 19 March 1997 I put forth the idea of the Combiner species as follows:

Swain 20 March 1997 page 5, par. 5	*The MEC Meter shown in exhibit III* is still more accurate near a magnet as stated in the boxed sector. The Clip** and Indicator are constructed so that the zero offset error due to a nearby magnet can be largely eliminated (canceled) by subtracting (combining) the result of two states of the Operating Parameter Q, which is now I_{sm} in a MEC meter.*

Exhibit III is a technical data sheet for the MEC meter.

I also put forth the idea of the Better SNR species as follows:

Swain 20 March 1997 page 5, par. 4	*A relatively simple implementation (genus) of the basic concept is shown in exhibit II*, and described in new claim IIN. We have sold some MER Meters, and they work better than the Standard DC Amp Clip** when it comes to accuracy near a magnet. The MER Clip and Indicator are constructed so that the SNR is improved by a factor of 2 or 3, as stated in the boxed sector in exhibit II.*

Exhibit II is a technical data sheet for the MER Meter.

That the basic concept is in every one of the then claims 1 - 13 plus new claims IN - IVN is made clear on page 1.

Swain 20 March 1997 page 1, par 2	*My traverse relies on the fact that the basic concept (Claim IN) is in every claim, so no claim would be patentable over another because it would lack novelty outside of this specification.*

Please note that reliance is on the basic concept, not (Claim IN). Here (Claim IN) is an illustration of one form of the basic concept.

The Examiner accepted my Traverse of a restriction requirement:

Examiner 22 Sept. 98 page 2, par. 1	*1. Because Applicant has indicated that no patentably distinct inventions or species are present the Restriction Requirements of February 21, 1997 and January 16, 1998 are withdrawn. It is noted that Applicant states on page 1 (actually the second page) of the Amendment of May 29, 1997: "My traverse relies on the fact that the basic concept (claim 14) is in every claim, so no claim would be patentable over another because it would lack novelty outside of this application."*

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3. Claim Selection

In the above, reliance is on the Basic Concept. The (Claim 14) is an illustration. I did not select claim 14 as the one claim on which all stand or fall. If this must now be done, I select generic method claim 66.

4. All claims include the Basic Concept, yet all claims are different.

The basic concept[2] is included in one form or another in all claims, old and new, including present claims 32 - 66. Yet it can be seen that they differ. Some are broad and/or brief, and some are detailed and/or narrow. Some are for apparatus and some are for method. Some are for the combiner species, some are for the Better SNR species. Still others include both species and are called generic. However, the claims are not patentably distinct in any significant way because some form of the Basic Concept appears in each.

Generic method claim 66 is considered stronger than generic apparatus claim 45. It has been requested that claim 66 be examined on merit if all must stand or fall on one claim. I never chose claim 45 for this.

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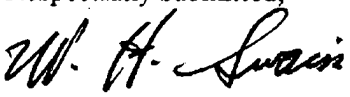
[2] One form of the Basic Concept is included in claim 14. Claim 14 started out as claim IN in March 1997. It was later renumbered to claim 14. Both are now canceled, but present generic claim 45 is similar. Other forms of the Basic Concept are included in generic claims 63 - 66.

I have never seen an Examiner's review of the merits of 3 year old generic claims 63 - 66. This is requested because method generic claim 66 is now considered stronger.

Respectfully submitted,



William H. Swain
Applicant
17 February 2004